# PROFILO LED 80

User's Manual rel. 1.1 **GB**

D.T.S. Illuminazione s.r.l. – ITALY
http://www.dts-lighting.it/

DTS
The Lighting Company

**Made in Italy**

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## 1- SYMBOLS

Graphic symbols used on this manual:

**THIS SYMBOL INDICATES A HOT SURFACE**

**THIS SYMBOL INDICATES ELECTRIC SHOCK RISK**

**THIS SYMBOL INDICATES GENERAL RISK**

**THIS SYMBOL MEANS YOU CAN PLACE THE UNIT ON NORMALLY FLAMMABLE SURFACES**

**THIS SYMBOL INDICATES THE MINIMUM DISTANCE TO BE KEPT BETWEEN THE DEVICE AND THE LIT OBJECT**

**THIS SYMBOL INDICATES THE EUROPEAN COMMUNITY DIRECTIVE 2002/96/EC ON WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**

## 2- GENERAL WARNING

Read the instruction contained in this user manual carefully, as they give important information regarding safety during installation , use and maintenance.
The device is not for domestic use and must be installed by a qualified electrician or experienced person.
Always disconnect the device from the mains before maintenance.
The device must always be equipped with an efficient ground connection.

## 3- GENERAL WARRANTY CONDITIONS

The unit is guaranteed for 36 months from the date of purchase against manufacturing material defects.

## 4- TECHNICAL FEATURES

### OVERVIEW

PROFILO LED 80 is a professional shaper featuring a single high-power White LED and 20° - 40° linear zoom with high-efficiency optical system.
PROFILO LED 80 features an internal rotating system with four removable shutters, to give high-precision shaping of light beams.
PROFILO LED 80 is a modern alternative to conventional lights, improving light quality, flexibility of use and installation, energy savings and component duration.
In fact the fixture doesn't heat up, and the projection is always flicker free.
Also, the dimming curves are similar to those of halogen lamps.
PROFILO LED 80 is contained in a strong housing with folded edges, designed to resist all the rigors of continuous use.
PROFILO LED 80 features a reversible yoke for using the projector in any position.
Also, the yoke has an exclusive round flange + clutch system which guarantees a perfect grip and safer operation.

### PRODUCT CODES:

| | |
|---|---|
| 03.TP022.46 | PROFILO LED 80 *WHITE 3000K *Black finish |
| 03.TP023.46 | PROFILO LED 80 *WHITE 4000K *Black finish |
| 03.TP024.46 | PROFILO LED 80 *WHITE 5000K *Black finish |

**LED Technology**
1 x White LED (3000K), 7700 lm, CRI>90; 4000K or 5000K also available (2700K, 5600K or 6500K on request)

**Optical group**
20° - 40° linear zoom

**Shutters**
4 removable shutters

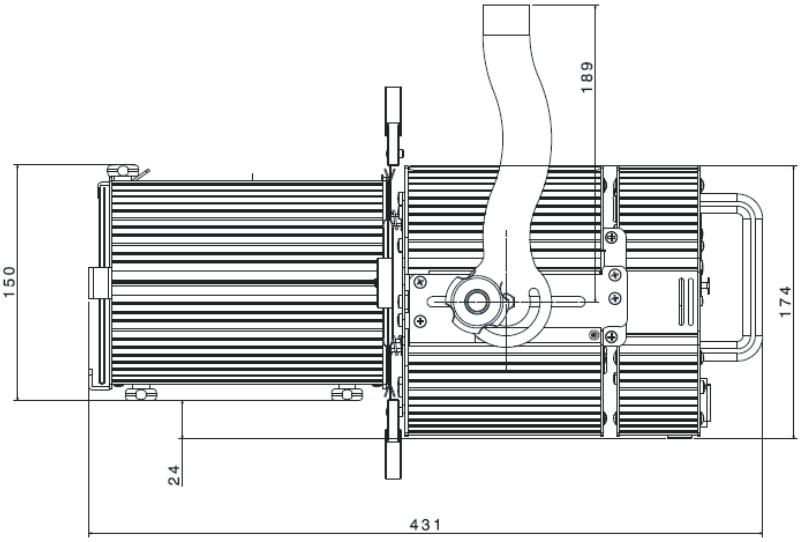
**Control**
2 DMX channels (default)
4 digit 7 segments display + 4 soft keys

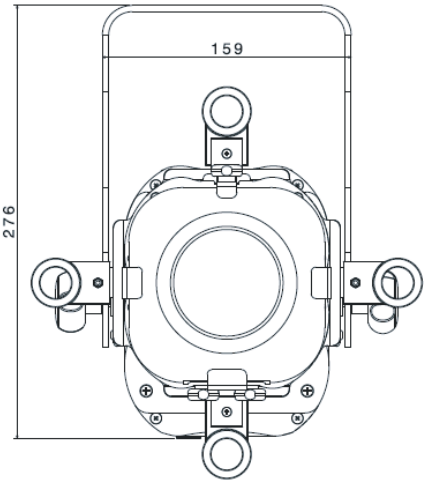
**Connection**
Power supply: POWERCON In/Out panel connectors
DMX: XLR 5 poles In/Out panel connectors

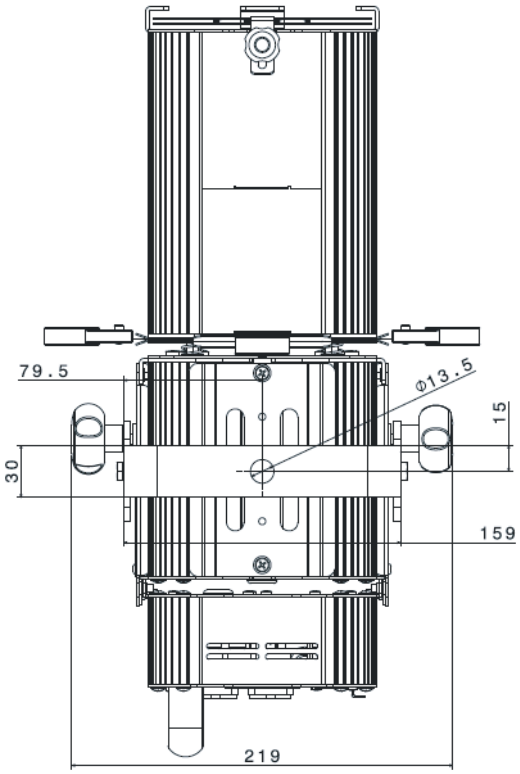
**Power supply**
Electronic full-range AC 90-260V 50-60 Hz
Consumption: 80W Max

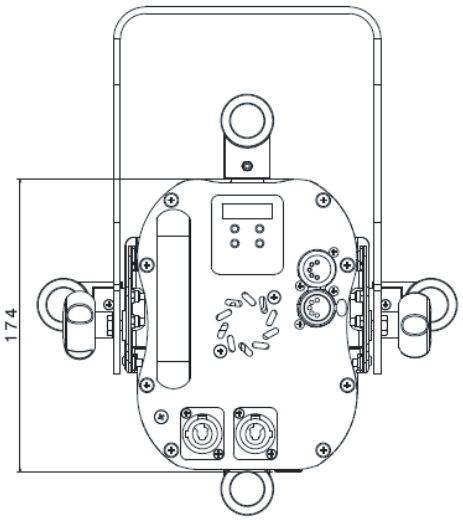
**Weight**
4,9 Kg

## DIMENSIONS




## 5- ACCESSORIES

### As standard

1 x User's Manual
1 x POWERCON male cable connector (D.T.S. Code 0520P014)
1 x XLR 5 pins male cable connector (D.T.S. Code 0508B028)
1 x XLR 5 pins female cable connector (D.T.S. Code 0508B027)
4 x Shutter blades (Single blade D.T.S. Code 02SK0041)
1 x Filterframe *Black finish (D.T.S. Code 02M00422.46)

### Optional (on request)

- "C" Clamp G60 (Max. Load. 50 Kg) *Black finish (D.T.S. Code 0521A004)
- Gobo holder (D.T.S. Code 03.TA208)
- Iris/diaphram (D.T.S. Code 03.TA207)
- Barndoor *Black finish (D.T.S. Code 03.TA206)

## 6- IMPORTANT SAFETY INFORMATION

### 6.1 Fire prevention:

It is permissible to place the unit on normally flammable surfaces.
Suitable for mounting on normally flammable materials surfaces greater than 200°C with some combustion time lag.
Minimum distance from the closest illuminable surface: 30 cm.
Replace any blown or damaged fuses only with those of identical value (2AT).

### 6.2 Prevention from electric shock:

High voltage is present inside the unit. Unplug the unit prior to performing any operation which involves touching the inside of the unit.
This equipment must be grounded, do not connect to non-grounded supplies.
The use of a thermal magnetic circuit breaker is recommended for each PROFILO LED 80 unit. Use only AC supplies 90-260V 50-60 Hz.
PROFILO LED 80 should never be located in position exposed to rain or in areas of extreme humidity.
A good air ventilation is essential for proper equipment work.

### 6.3 Safety:

The external surface of the unit may exeed 50°C; never handle the unit until at least 5 minutes have elapsed since the unit was turned off.
Never install the unit in an enclosed area lacking sufficient air flow.
The ambient temperature should not exeed 40°C and should not be lower than -10°C.

### 6.4 Waste Electrical and Electronic equipment (WEEE) directive:

The unit, accessories and packaging should be sorted for environmetal-friendly recycling.
For EC countries: according to the European Directive 2002/96/EC for Waste Electrical and Electronic Equipment and its implementation into national right, luminaires that are no longer usable must be collected separately and disposed of in an environmentally correct manner.

## 7- INPUT / OUTPUT CONNECTIONS

**DISPLAY PANEL**

**DMX IN**
**XLR 5 Pins Male Panel Connector**

**DMX OUT**
**XLR 5 Pins Female Panel Connector**

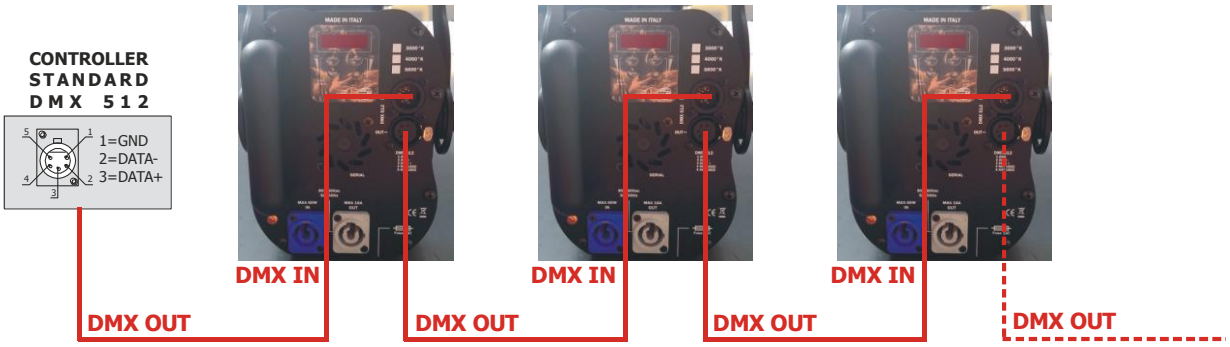
**MAINS AC INPUT 90-260V 50-60 Hz**

**MAINS AC OUTPUT 90-260V 50-60 Hz**
**Max 30 units @ 230Vac**
**Max 15 units @ 110Vac**

**FUSE 2AT**

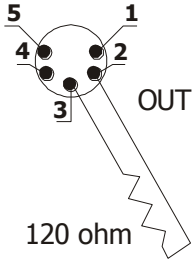
## 8- DMX SIGNAL CONNECTION:

The unit operates using a digital DMX 512 signal.
Connection between the controller and the unit or between units must be carried out using a two pair screened ø 0.5 mm.
Ensure that the conductors do not touch each other.
Do not connect the cable ground to the DMX connector chassis.
The plug housing must be isolated. Connect the mixer signal to the DMX IN projector plug and connect it to the next projector by connecting the DMX OUT plug on the first unit to the DMX IN plug of the second one.
In this way, all the projectors are cascade connected.

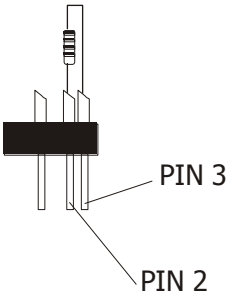



If the display showing the DMX address flashes, then one of the following errors has occurred:
- DMX signal not present
- DMX reception problem

For Installations where long distance DMX cable connections are needed, we suggest to use a DMX terminator.
The DMX terminator is a male XLR 3-5 pins connector with a 120 ohm resistor Between pin 2 and 3.
The DMX terminator must be plugged into the last unit (DMX out panel connector) of the DMX line.




PLACE A 120 OHM RESISTOR BETWEEN PIN 2 AND 3 OF A MALE XRL CONNECTOR AND PLUG IT INTO THE DMX OUT PANEL CONNECTOR OF THE LAST UNIT CONNECTED TO THE DMX LINE



## 8.1 DMX addresses

PROFILO LED 80 can be controlled with 2 DMX channels (default), 3 DMX channels or 1 DMX channel.
In order to use the unit in 2 DMX channels mode, set the following addresses on the mixer:

| | | |
|---|---|---|
| Projector 1 | A001 | |
| Projector 2 | A003 | If you want to select the next projector, just add “2” |
| Projector 3 | A005 | |
| ….. | A…. | |
| projector 6 | A011 | |

## 8.2 Selecting the DMX address

1) Press the UP-DOWN key until you reach the required DMX address. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

TIPS: if you keep pushed the UP or DOWN keys, the channels are calculated more quickly and you get a faster selection.
2) Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new DMX address.

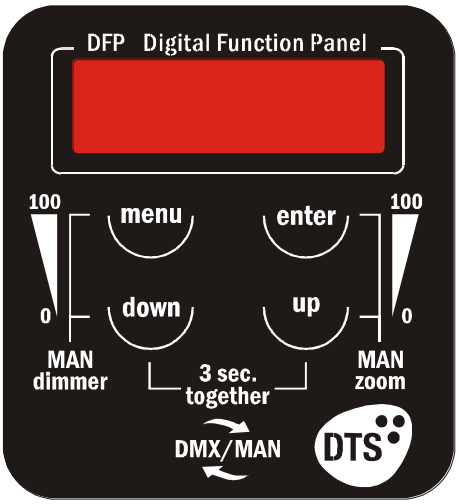
## 9- FIRMWARE UPDATING

To update the software version of the PROFILO LED 80 you need:
- D.T.S. RED BOX interface (D.T.S. Code: 03.LA.008)
- USB-DMX Driver for the D.T.S. RED BOX interface
- “D.T.S. Firmware upgrade utility” program installed on PC
- Latest firmware release available for PROFILO LED 80 unit

**Updating the software version.**
Please follow the procedure below to perform the update:

1. Install the D.T.S. RED BOX USB-DMX driver on the PC you will use to update the unit software.
2. Connect the D.T.S. RED BOX interface to the PC by using a USB cable.
3. Connect the D.T.S. RED BOX interface to the fixture by using a DMX cable.
4. Send the new software version into the unit by using “D.T.S. Firmware upgrade Utility” program.

## 10- DISPLAY FUNCTIONS




## DISPLAY FUNCTIONS

The PROFILO LED 80 display panel shows all the available functions.
Using these functions, it is possible to change some of the parameters and add some functions. Changing the D.T.S. setting can vary the functions of the unit so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.
NOTE: the symbol ☞ shows which key has to be pushed to obtain the desired function.

### Software version 1.07

A001 ☞MENU ☞Up-Down dISP ☞ENTER ☞Up-Down PoS1 ☞ENTER ☞Up-Down

- AA — Floor Position ☞ENTER
- HH — Suspended Position ☞ENTER
- ☞Up-Down StbY ☞ENTER ☞Up-Down
  - oFF — Display Off ☞ENTER
  - on — Display Always on ☞ENTER

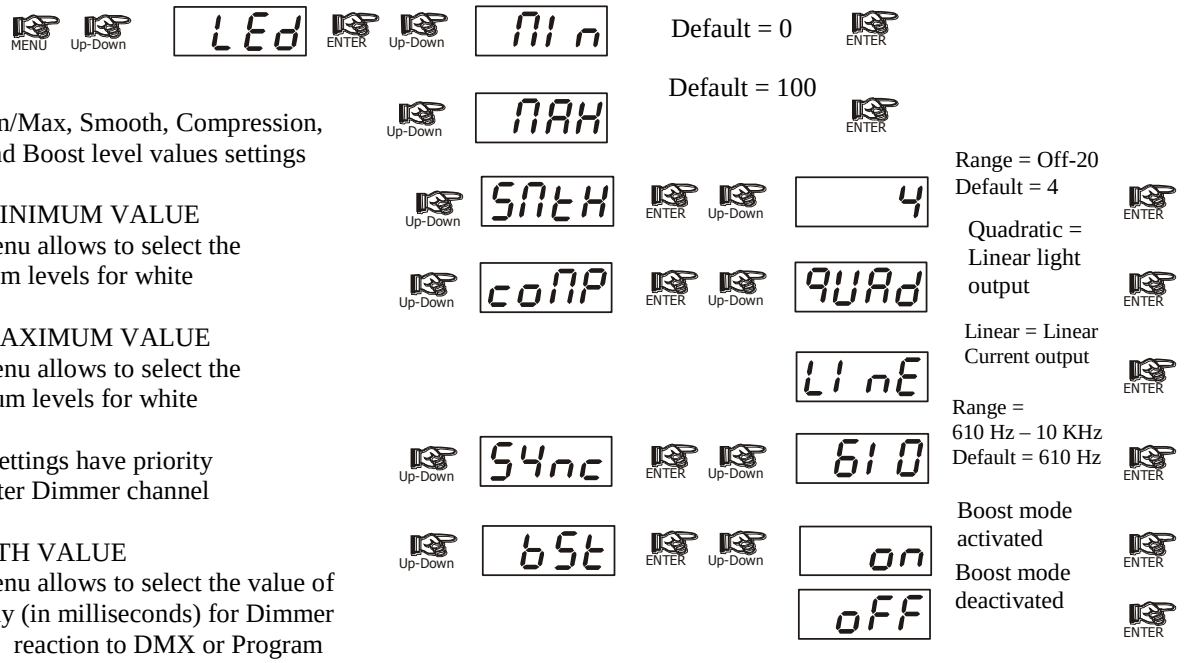
REVERSE DISPLAY
Reverses display's reading depending on the mounting position (on the ground or suspended).

DISPLAY STAND BY
To turn off the display (after 5 seconds) Or leave it always on.

☞MENU ☞Up-Down nOdE ☞ENTER ☞Up-Down

- 2cH ☞ENTER — Default DMX Mode 2 Channels
- 1cH ☞ENTER — 1 DMX channel mode
- 3cH ☞ENTER — 3 DMX channels mode
- ☞Up-Down nAn ☞ENTER SUrE ☞ENTER — Manual Mode

DMX MODE
To select DMX mode : 2 DMX channels mode (default), 1 DMX channel mode, 3 DMX channels mode or Manual mode. Manual mode can also be activated by pressing at the same time the "UP'' + "DOWN" buttons on unit display for 3 seconds ("A001").




LED
Led Min/Max, Smooth, Compression, Sync and Boost level values settings

LED MINIMUM VALUE
This menu allows to select the minimum levels for white

LED MAXIMUM VALUE
This menu allows to select the maximum levels for white

These settings have priority on Master Dimmer channel

SMOOTH VALUE
This menu allows to select the value of the delay (in milliseconds) for Dimmer channel reaction to DMX or Program variation.
Off = 25 ms. Instant response to DMX variation.
20 = 250 ms. Smooth response to DMX variation.

COMPRESSION
This menu allows to select between Linear current output or Quadratic current output for LEDs
Default = Quadratic

SYNC
This menu allows to adjust the PWM frequency value (Hz) in order to reduce flickering in the process of your camera recordings

BOOST DRIVING
This menu allow to increase the LED's current from Min to Max

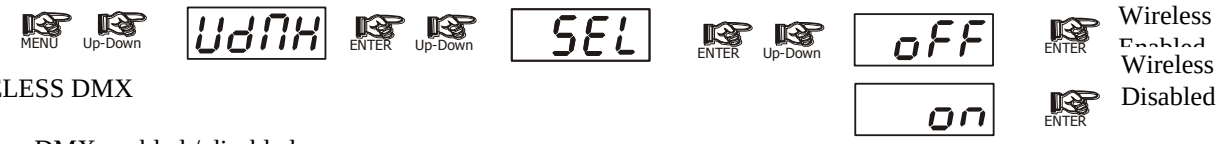
With BOOST active, the LED'S current is set to Max value. (30% more gain compared to BOOST Off)
Default = Disabled

DIMMER
Dimmer intensity level (range 0-255)
Active only if MODE = 1 DMX channel mode

Note:
External infrared remote sensor needed (D.T.S. Code: 03.LA.016)

INFRARED MODE
Infrared remote control.
By activating Ir Mode, it will be possible to navigate trought the unit functions by using the D.T.S. infrared remote control
(D.T.S. Code: 0514L008)

**NOT IMPLEMENTED ON PROFILO LED 80**




WIRELESS DMX

Wireless DMX enabled / disabled.
By activating WDMX MODE, it will be possible to control PROFILO LED 80 via D.T.S. ANTENNA Wireless DMX Transmitter (cod. 03.E1271).
Active only on PROFILO LED 80 with Wireless on board

UNLINK = LOG OUT

**NOT IMPLEMENTED ON PROFILO LED 80**

Logging on PROFILO LED 80 (WIRELESS DMX must be enabled on PROFILO LED 80 unit)

To log on the PROFILO LED 80 in the WIRELESS system simply press and quickly release the function button on the transmitter.
The transmitter will start flashing rapidly red/green scanning for new free receivers / PROFILO LED 80 units.
When a PROFILO LED 80 logs on to the transmitter the LINK green light on transmitter starts to flash rapidly.
After approximately 10 seconds the transmitter will jump back to normal mode and continue transmitting data.
The PROFILO LED 80 now try to synchronize to the transmitter.
When synchronized to the transmitter, 2 different modes are possible:
1. Antenna transmitter has detected and transmits a DMX signal, in this mode a solid green light is seen on the transmitter and solid display is seen on PROFILO LED 80.
2. No DMX signal connected, the Antenna transmitter will flash red/green; display blinking on PROFILO LED 80.

To log PROFILO LED 80 off from a transmitter simply select UNLINK function UnLH under WIRELESS DMX MENU UdMH and press ENTER.
When PROFILO LED 80 is logged off, the display is blinking, meaning its available for log in on a new transmitter.

Logging out a PROFILO LED 80

Select UNLINK function UnLH under WIRELESS DMX MENU UdMH and press ENTER.
When PROFILO LED 80 is logged off the display is blinking, meaning its available for log in on a new transmitter.

Logging out all PROFILO LED 80 units linked to a transmitter

Press and hold the function button of the transmitter for about 3 seconds. When the display is blinking on PROFILO LED 80, it mean that the units are logged out.

Transmitter, Status LED
Flashing red/green, no dmx connected.
Solid green, dmx signal detected and transmitted.
Fast flashing red/green, log in mode (every free PROFILO LED 80 unit, not logged in to any other transmitter, will be logged on)

PROFILO LED 80 Status
Display blinking = not logged on to a transmitter (free).
Solid display = logged on to a transmitter and receiving dmx data.

Default = OFF

EMERGENCY
Emergency operating mode.
By setting Emergency mode, it will be possible to select Dimmer intensity level that will then ran if DMX signal is missing or not available.
Usefull for Emergency EXIT illumination on public areas.

Default = 204 (80%)

DEFAULT SETTING
To restore default settings

TEMPERATURE
LED Driver board and LED temperature monitoring

LIFE TIME
This menu show the total unit life time and the LED life time

SOFTWARE
Software version

## 11- DMX PROTOCOL

### 2 CHANNELS MODE (Default)

**1 SHUTTER / STROBE**
**2 DIMMER**

| DMX CHANNEL | 1 | Parameter: **SHUTTER / STROBE** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-009** | | | | | **Black-out** |
| **010-019** | | | | | **Open** |
| **020-029** | | | | | **Black-out** |
| **030-119** | | | | | **Strobe (from 3.27 s to 30 ms)** |
| **120-149** | | | | | **Pulse up (from 42.6 s to 120 ms)** |
| **150-179** | | | | | **Pulse down (from 42.6 s to 120 ms)** |
| **180-204** | | | | | **Random strobe (Dimmer channel active)** |
| **205-229** | | | | | **Full independent Random Strobe (Dimmer channel disabled)** |
| **230-255** | | | | | **Open** |

| DMX CHANNEL | 2 | Parameter: **DIMMER** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional dimmer** |

### 1 CHANNEL MODE

**1 DIMMER**

| DMX CHANNEL | 1 | Parameter: **DIMMER** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional dimmer** |

## 3 CHANNELS MODE

**1 SHUTTER / STROBE**
**2 DIMMER**
**3 DIMMER FINE**

| DMX CHANNEL | 1 | Parameter: **SHUTTER / STROBE** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-009** | | | | | **Black-out** |
| **010-019** | | | | | **Open** |
| **020-029** | | | | | **Black-out** |
| **030-119** | | | | | **Strobe (from 3.27 s to 30 ms)** |
| **120-149** | | | | | **Pulse up (from 42.6 s to 120 ms)** |
| **150-179** | | | | | **Pulse down (from 42.6 s to 120 ms)** |
| **180-204** | | | | | **Random strobe (Dimmer channel active)** |
| **205-229** | | | | | **Full independent Random Strobe (Dimmer channel disabled)** |
| **230-255** | | | | | **Open** |

| DMX CHANNEL | 2 | Parameter: **DIMMER** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional dimmer** |

| DMX CHANNEL | 3 | Parameter: **DIMMER FINE** |
|---|---|---|

| DMX range Value | Mid Point DMX value | Move Range (degrees) | Mode | Option | Function |
|---|---|---|---|---|---|
| **000-255** | | | | | **Proportional dimmer** |

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DTS

The Lighting Company

**ISO 9001:2008**
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is certified to the
ISO 9001:2008 standard

PROUDLY MADE IN ITALY

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plants in italy

**0517I224**

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